GEORGIA: Tallulah Falls, August 8, 1893, *J. K. Small;* Thomas Bald, August 9, 1893, *J. K. Small;* Estotoah Falls, August 11–12, 1893, *J. K. Small* (type); Stone Mountain, July 27, 1893, *J. K. Small.*

ALABAMA: Auburn, June 5, 1897, *Earle & Baker*, no. 276.

DIEMBRYONY IN CORN

BY BYRON D. HALSTED

In making some germination tests of corn upon a large scale a single grain was met with that showed a double embryo—one apparently normal and the other secondary. The grain in germination was lying with the embryo side downward so that the main plantlet needed to turn upward around one side of the grain making a J-shaped curve. The smaller shoot grew nearly parallel with the first one and stood close to it, although much smaller. The grain was transferred from the germinating dish to earth in a flower pot and supplied with conditions for further growth, at which time each plantlet had a main root.

After growing as long as the smaller plant would, the two were removed and a photograph taken from which the little side engraving has been made.

It is seen that one plant grew quite normally, while the other remained small and attempted to produce two ears, but without tassel, and no grains were obtained.

It only needs to be said that the case in hand was a yellow grain from an ear picked upon the College Farm and brought to me, because it was the only one of a large field that had dark, nearly cherry-colored grains mixed in almost equal numbers with

the yellow grains. It is regretted that a sketch of the two embryos was not made before the grain was placed in the earth for further growth. Out of very many thousands of germinating grains of corn, this is the only one showing diembryony that has come to my notice.

RUTGERS COLLEGE, May 4, 1901.

REVIEWS

A work that is sure to play an important part in popularizing botanical studies on the Pacific Coast is the recently published "Flora of Western Middle California" * by Dr. Willis Linn Jepson, Assistant Professor of Botany in the University of California. This is a carefully written and attractively printed descriptive manual, with keys to the families, genera, and species. In many species a considerable range of variability is recognized, especially in vegetative characters, under conditions which are definitely named. New species and varieties are described in various genera. In the matter of nomenclature, it is not wholly obvious just what considerations have determined the choice of generic names. The nomenclature is evidently not that of Berlin, Kew, Harvard, the Rochester Code, or of the Flora Franciscana. With considerable allowance for the inherent difficulties of making one's practice seem always consistent and logical to another, it may be said that Professor Jepson's selection of names has the appearance of being an arbitrary compromise between the so-called "conservative" and "reform" tendencies. The influence of the American principle of "Once a synonym, always a synonym" is doubtless to be recognized in the substitution of *Tumion* Raf. for *Torreya* Arn., *Osmaronia* Greene for *Nuttallia* T. & G., and *Xylothermia* Greene for *Pickeringia* Nutt. To the "priority of place" idea is evidently to be attributed the acceptance of *Tissa* Adans. in the place of *Buda* Adans., while simple priority of publication is apparently responsible for the adoption of *Panicularia* Fabric. for *Glyceria* R. Br., *Razoumofskya* Hoffm. for *Arceuthobium* Bieb., *Koellia* Moench for *Pycnanthemum*

* Jepson, W. L. A Flora of Western Middle California. 8vo. Pp. iv + 625. 16 Ap. 1901. Encina Publishing Co., Berkeley. Price $2.50.